

Fig. 1a

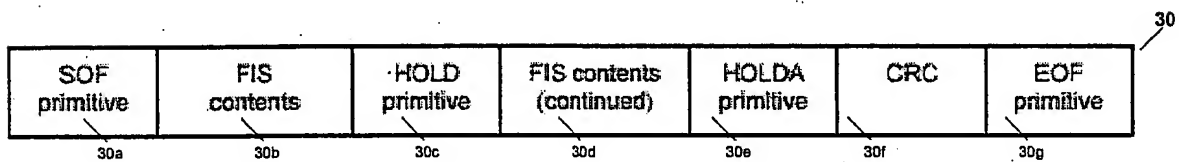


Fig. 1b

31

				Register access operation		
				Read	Write	
31cs0	CS 0 Active:	A2	A1	A0	Data Port 31dn	
		0	0	0		
		0	0	1	Error 31e	Features 31f
		0	1	0	Sector Count [15:8], [7:0] 31gs	
		0	1	1	Sector Number [31:24], [7:0] 31gn	
		1	0	0	Cylinder Low [39:32], [15:8] 31gl	
		1	0	1	Cylinder High [47:40], [23:16] 31gh	
		1	1	0	Device / Head 31dv	
				Status 31s	Command 31c	
31cs1	CS 1 active	1	1	0	Alternate Status 31ns	Device Control 31dc

Fig. 1c

0	Features	Command	C	R	R	Reserved (0)	FIS Type (27h)	40(ii)
1	Dev / Head	Cyl High				Cyl Low	Sector Number	
2	Features (exp)	Cyl High (exp)				Cyl Low (exp)	Sector Num (exp)	
3	Control	Reserved (0)				Sector Count (exp)	Sector Count	
4	Reserved (0)	Reserved (0)				Reserved (0)	Reserved (0)	

Fig. 1d(i) Register FIS Host to Device

0	Error	Status	R	I	R	Reserved (0)	FIS Type (34h)	40(iii)
1	Dev / Head	Cyl High				Cyl Low	Sector Number	
2	Reserved (0)	Cyl High (exp)				Cyl Low (exp)	Sector Num (exp) (0)	
3	Reserved (0)	Reserved (0)				Sector Count (exp)	Sector Count	
4	Reserved (0)	Reserved (0)				Reserved (0)	Reserved (0)	

Fig. 1d(ii) Register FIS Device to Host

0	Reserved (0)	Reserved (0)	R	R	R	Reserved (0)	FIS Type (39h)	40(iii)
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Fig. 1d(iii) DMA Activate FIS, Device to Host

0	Reserved (0)	Reserved (0)	A	I	D	Reserved (0)	FIS Type (41h)	40(vi)
1		0					TAG	
2		0						
3		Reserved (0)						
4		DMA Buffer Offset						
5		DMA Transfer Count						
6		Reserved (0)						

Fig. 1d(iv) DMA Setup FIS

0	Error	R	Status Hi	R	Status Lo	R	I	R	Reserved (0)	FIS Type (A1h)	40(v)
1									Active 31:0	41	

Fig. 1d(v) Set Device Bits FIS

0	Error	Status	R	I	D	Reserved (0)	FIS Type (5Fh)	40(vi)
1	Dev / Head	Cyl High				Cyl Low	Sector Number	
2	Reserved (0)	Cyl High (exp)				Cyl Low (exp)	Sector Num (exp) (0)	
3	E_Status	Reserved (0)				Sector Count (exp)	Sector Count	
4		Reserved (0)					Transfer Count	

Fig. 1d (vi) PIO Setup FIS

0	Reserved (0)	Reserved (0)	R	R	R	Reserved (0)	FIS Type (46h)	40(vii)
...	N Dwords of data (minimum of one Dword - maximum of 2048 Dwords)							
...								
n								

Fig. 1d (vii) Data FIS

0	Reserved (0)	Pattern Definition	R	R	R	Reserved (0)	FIS Type (58h)	40(viii)
		T A S L F P R V						
1	Data [31:24]	Data [23:16]				Data [15:8]	Data [7:0]	
2	Data [31:24]	Data [23:16]				Data [15:8]	Data [7:0]	

Fig. 1d (viii) BIST Activate FIS

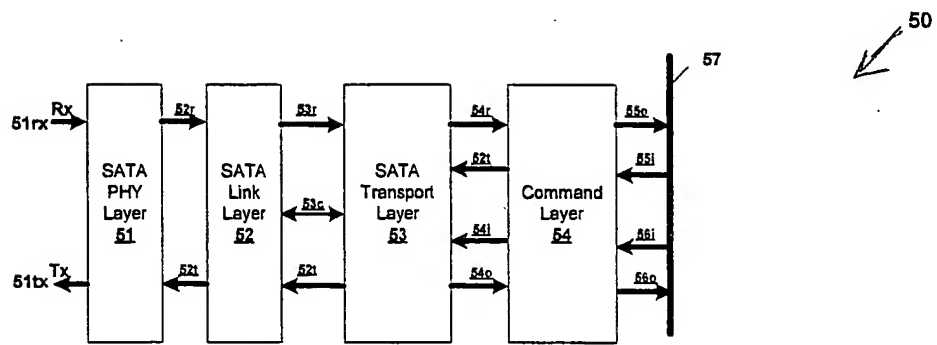


Fig. 2a

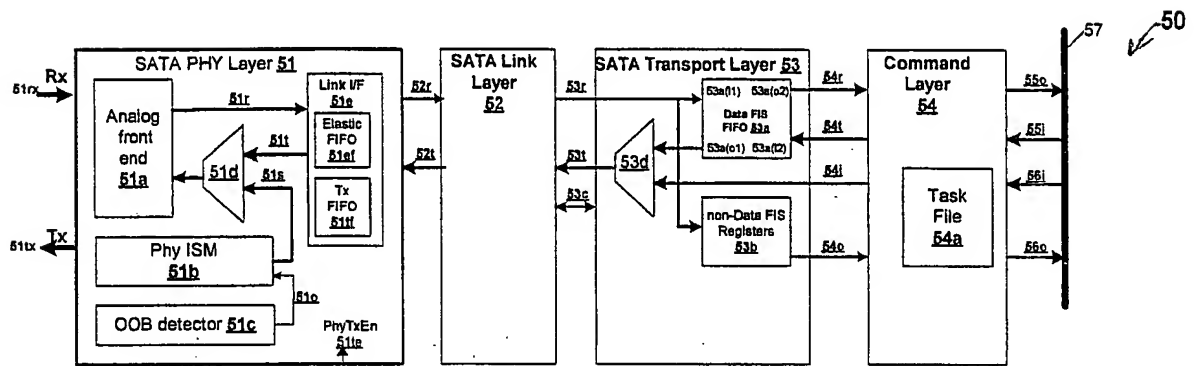


Fig. 2b

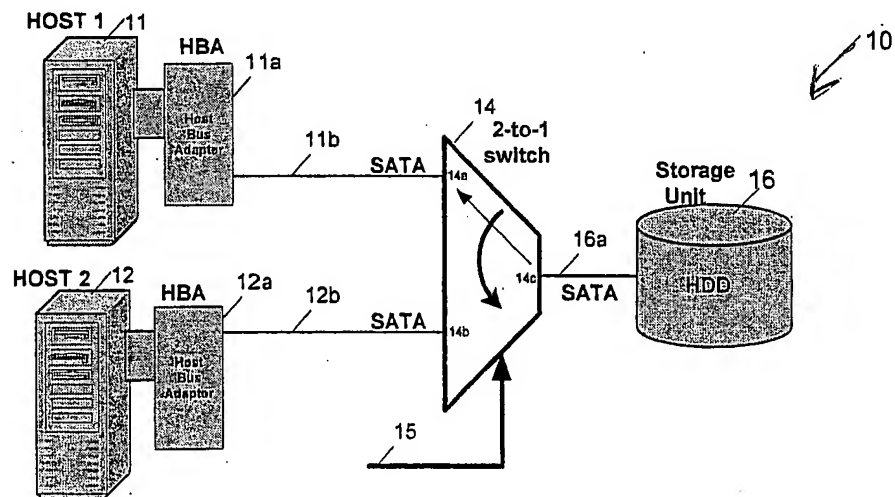


Fig. 3a

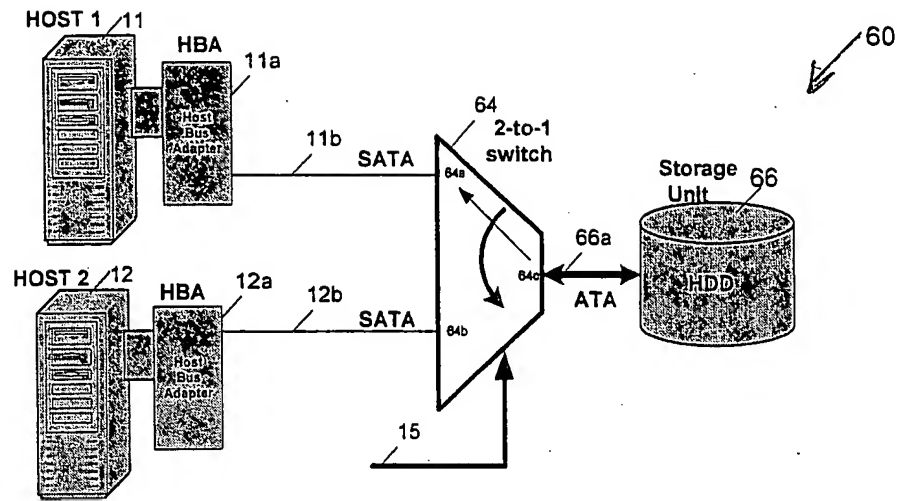


Fig. 3b

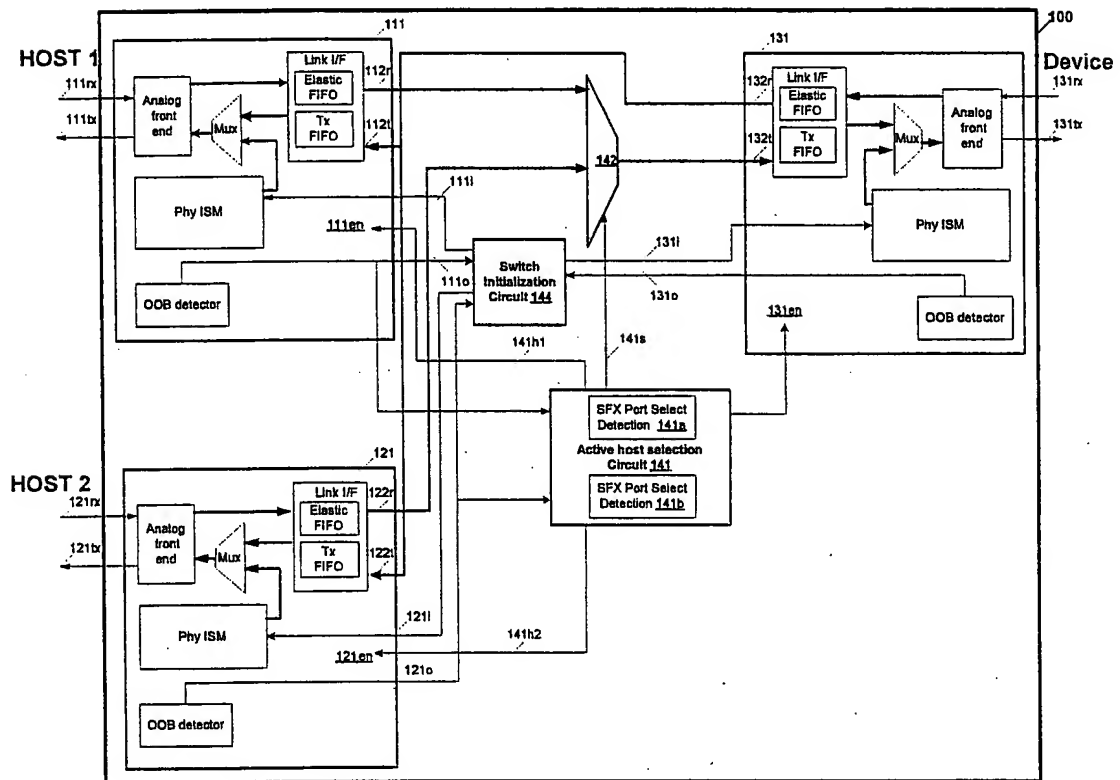


Fig. 4

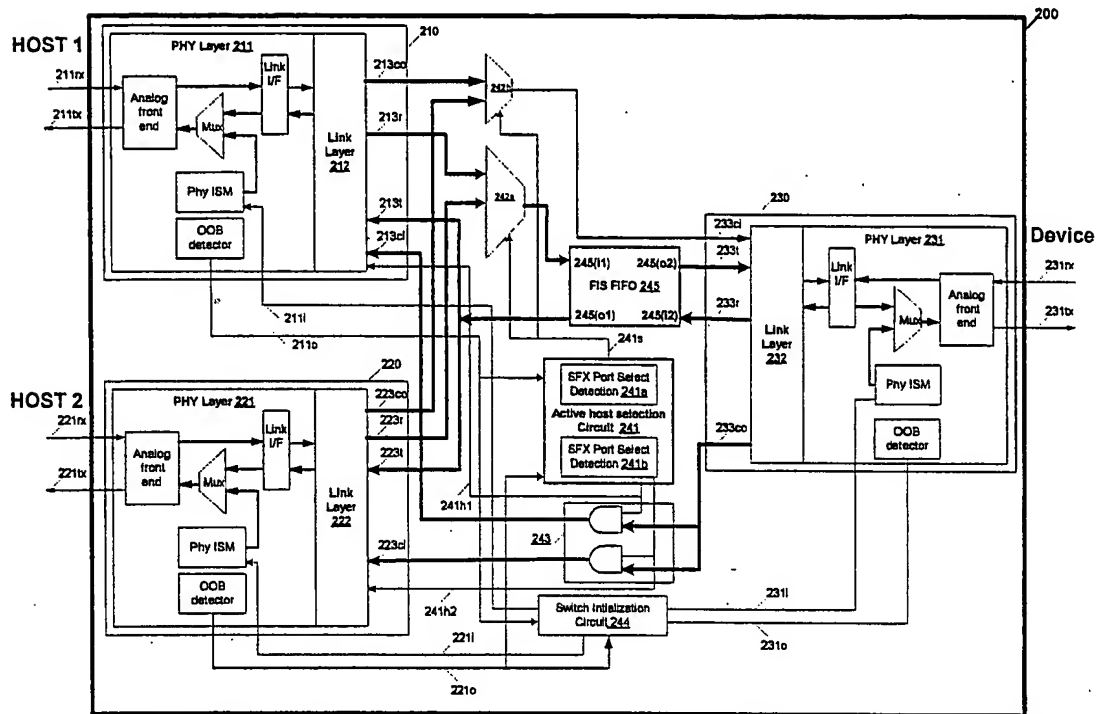


Fig. 5

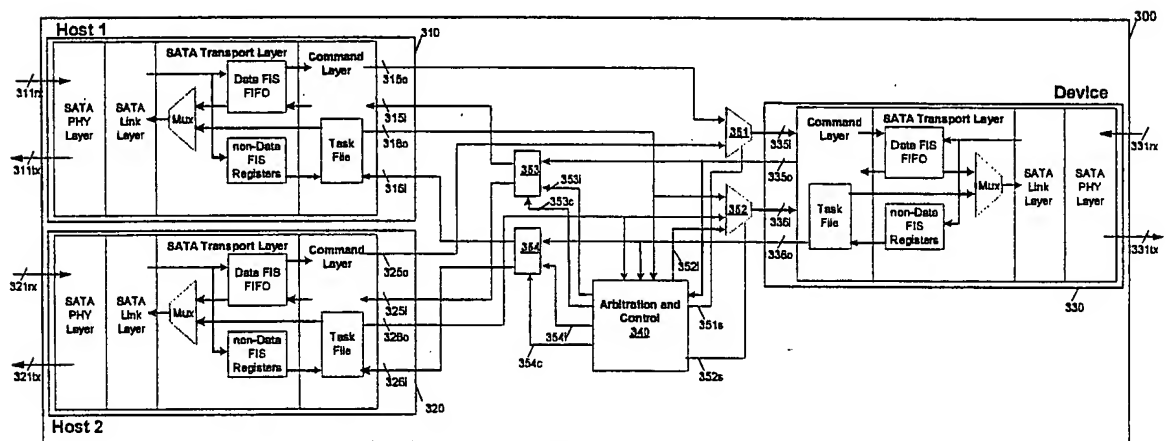


Fig. 6

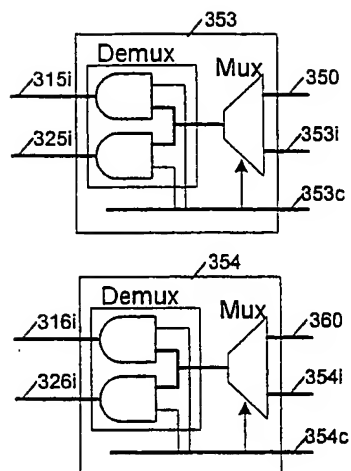


Fig. 7c

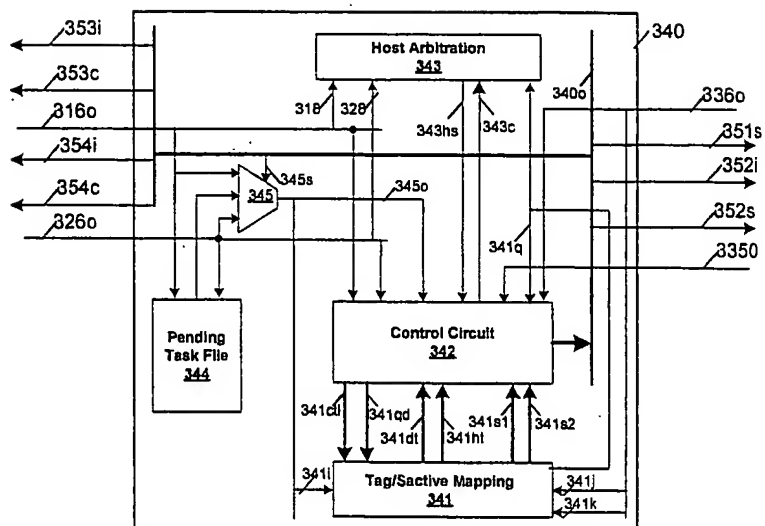


Fig. 7a

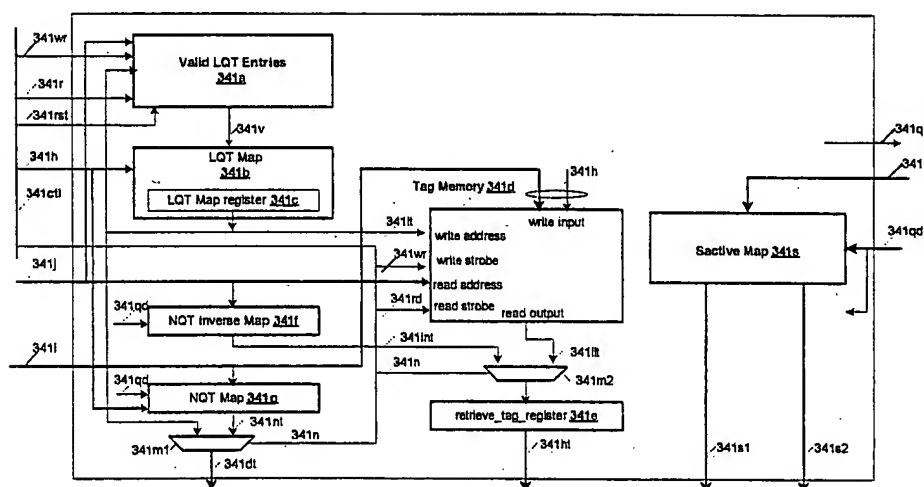


Fig 7b

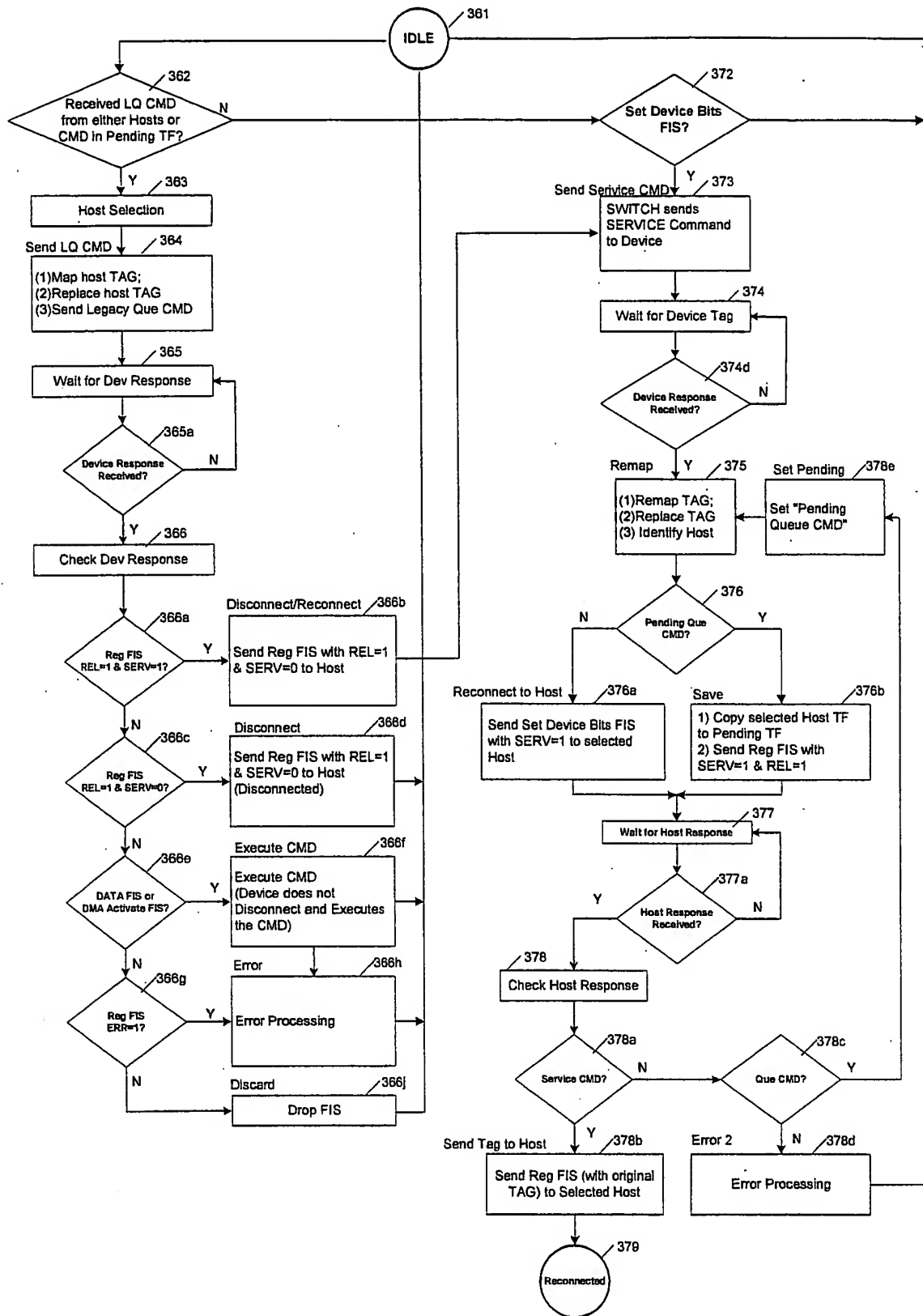


Fig 8a

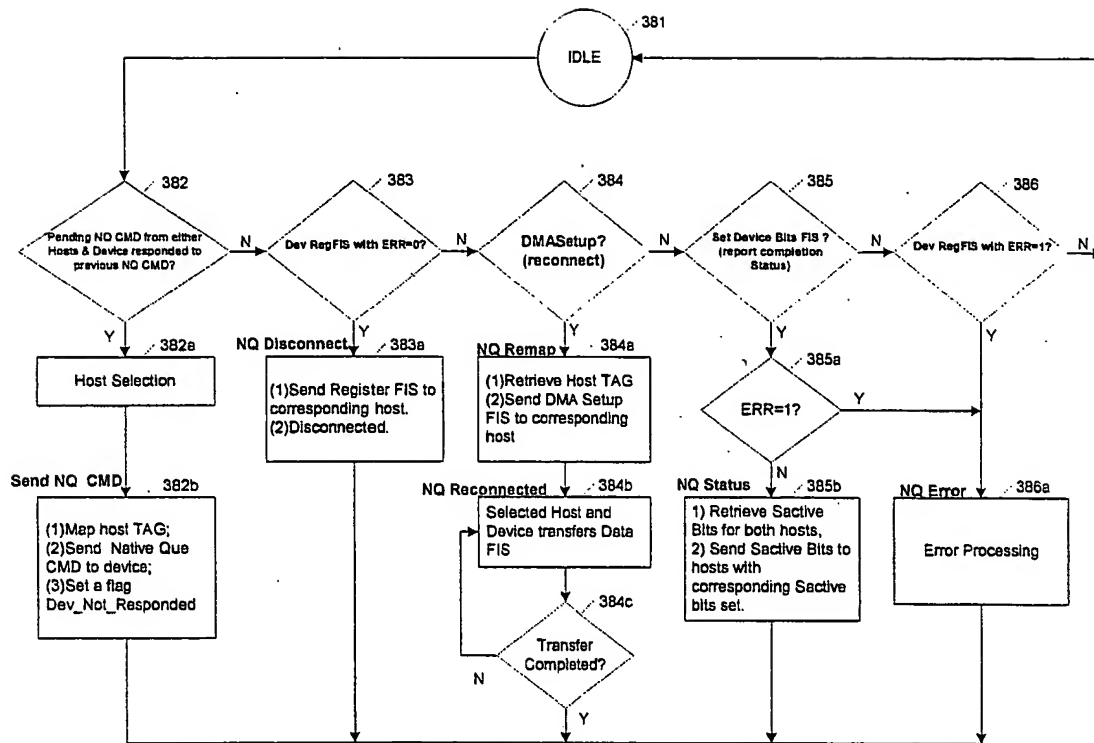


Fig 8b

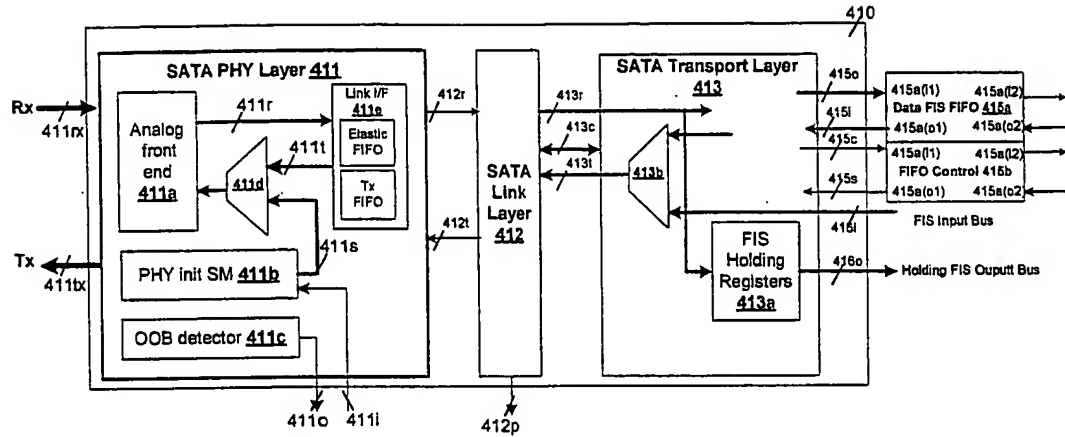


Fig. 9

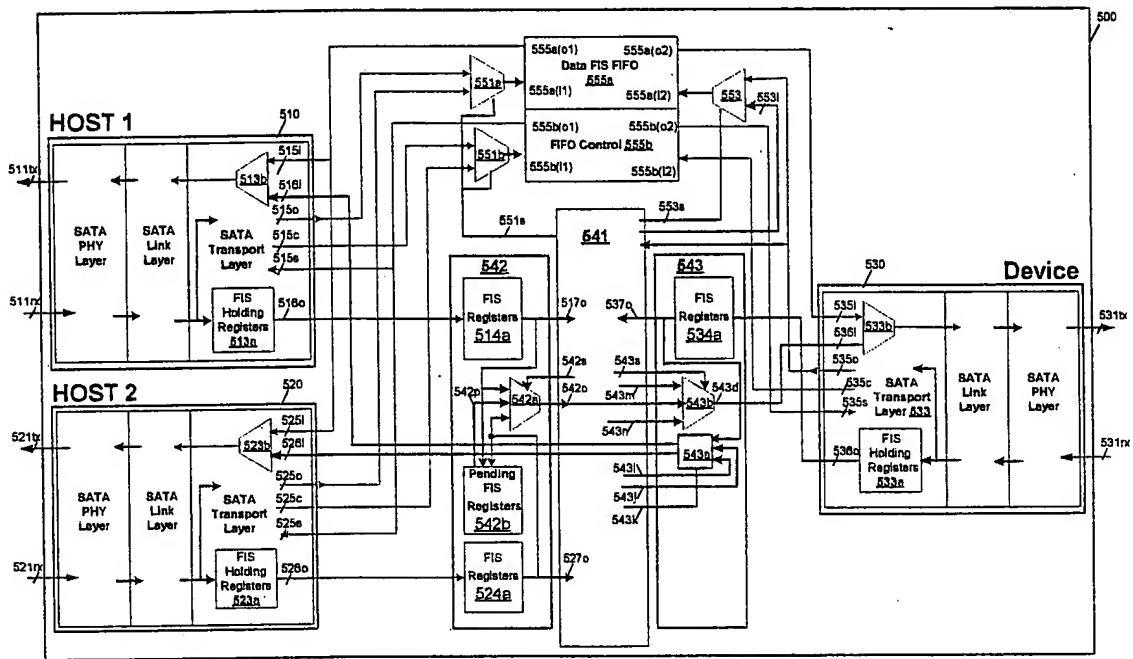


Fig. 10a

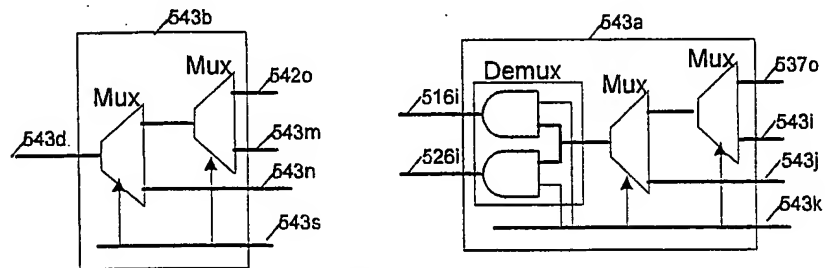


Fig. 10c

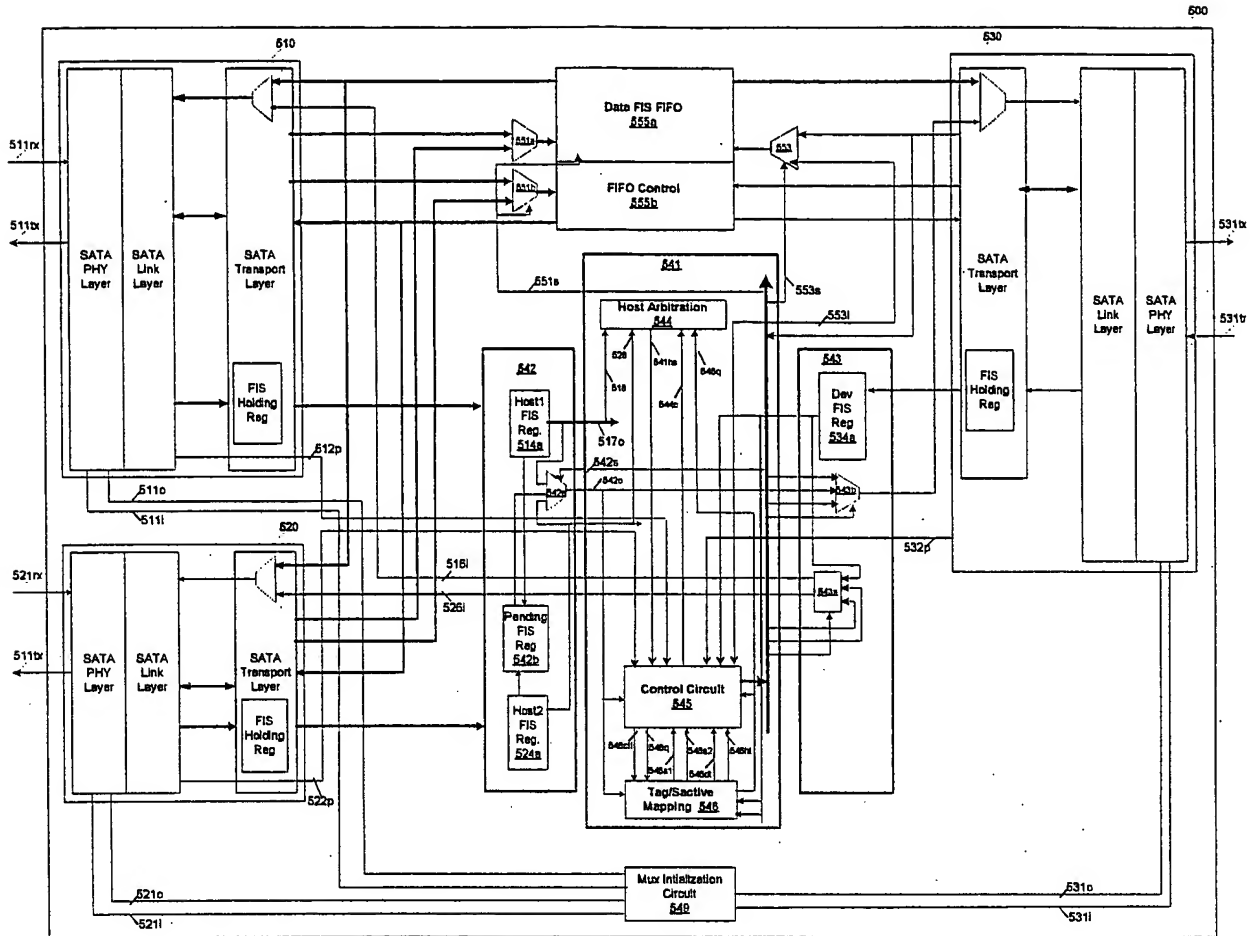


Fig. 10b

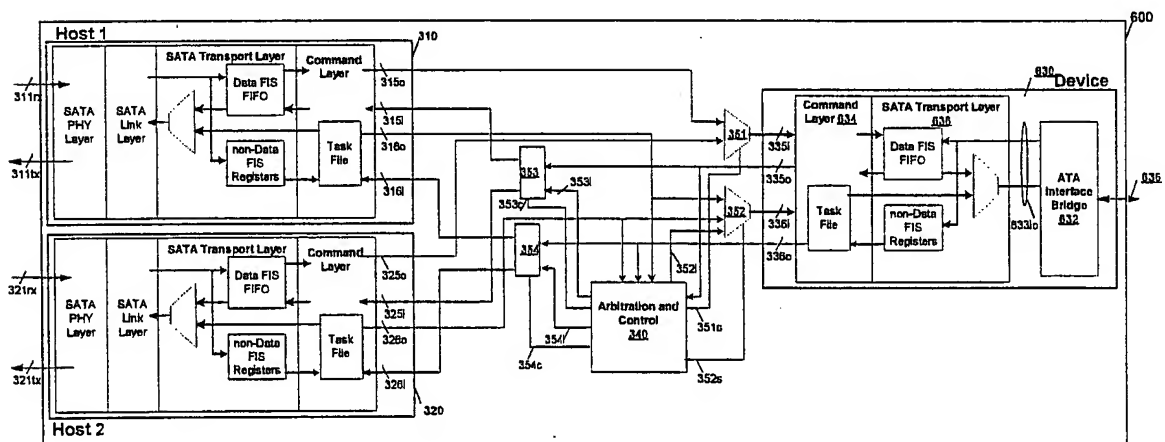


Fig. 11a

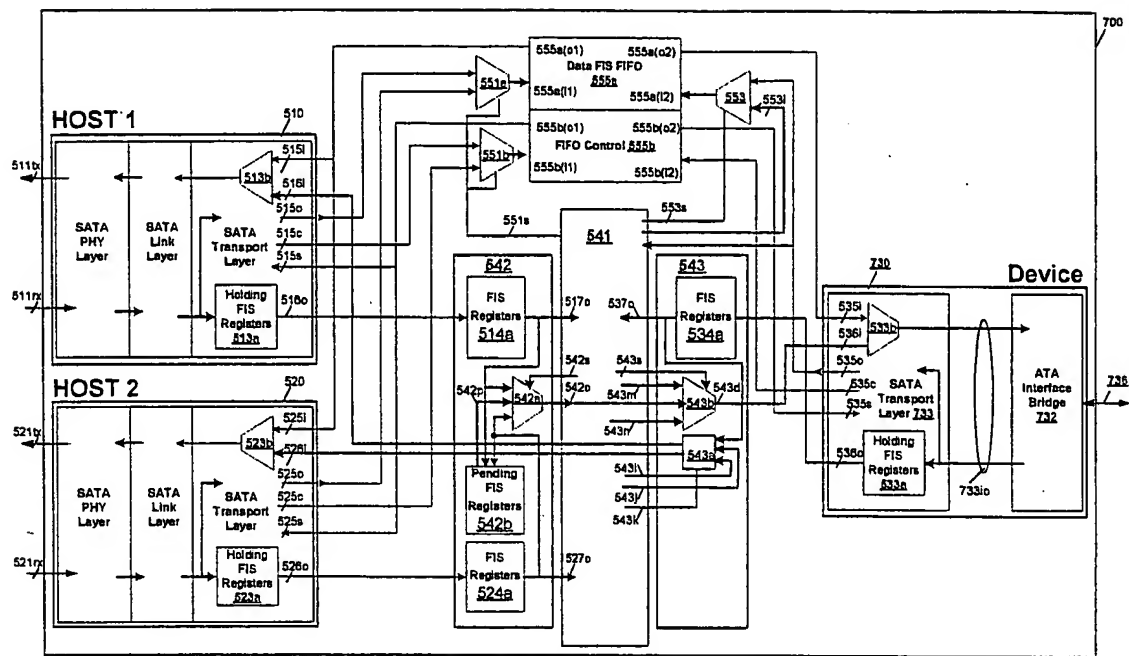


Fig. 11b

90(i)

H-bit 01(1)

90(ii)

H-blt 91(III)

90(iii)

H-blt ,91(

90(vi)

H-blt 91

90(v)

H-bit 91(vi)																				
0	Error				Status				R	I	D	Reserved (0)				FIS Type (5Fh)				90(vi)
1	Dev / Head				Cyl High				Cyl Low				Sector Number							
2	Reserved (0)				Cyl High (exp)				Cyl Low (exp)				Sector Num (exp) (0)							
3	E_Status				Reserved (0)				Sector Count (exp)				Sector Count							
4	Reserved (0)								Transfer Count											

Fig. 12 (vi) PIO Setup FIS

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The diagram illustrates the structure of a PIO Setup FIS. It is a horizontal bar divided into several sections. The first section is labeled '0'. The second section is labeled 'Reserved (0)'. The third section contains three 'R' characters. The fourth section is labeled 'Reserved (0)'. The fifth section is labeled 'FIS Type (46h)'. The sixth section is labeled 'N Dwords of data (minimum of one Dword - maximum of 2048 Dwords)'. A bracket above the 'Reserved (0)' section indicates a size of '91(vii)'. A label 'H-bit' points to the first bit of the 'Reserved (0)' section. A label '90(vii)' points to the end of the 'FIS Type (46h)' section.

0	Reserved (0)	R R R	Reserved (0)	FIS Type (46h)
...	N Dwords of data (minimum of one Dword - maximum of 2048 Dwords)			
...				
n				

Fig. 12(vii) Data FIS

Fig. 12(vii) Data FIS

0	Reserved (0)	Pattern Definition	R	R	R	Reserved (0)	FIS Type (58h)	
		T A S L F P R V						
1	Data [31:24]	Data [23:16]	Data [15:8]			Data [7:0]		
2	Data [31:24]	Data [23:16]	Data [15:8]			Data [7:0]		

Fig. 12 (viii) BIST Activate FIS

Fig. 12